

We claim:

- 1 1. A method of maintaining real-time data for multi-channel
2 communication queuing, comprising:
3 forming a list of agent data, wherein the agent data includes information
4 related to types of communication media an agent can access.
- 1 2. The method of claim 1, wherein the agent data further includes
2 information related to the agent's skills.
- 1 3. The method of claim 1, further comprising:
2 maintaining a list of media routes.
- 1 4. The method of claim 3, further comprising:
2 compiling statistics for the media routes including waiting time during a
3 period, handling time during a period, number of abandon requests,
4 longest waiting time, percentage of available agents, number of work
5 items, and number of work items delivered to an agent.
- 1 5. The method of claim 1, further comprising:
2 compiling statistics for a communication channel of a specified media type
3 including start time, end time, average wait time, average time spent
4 handling a work item, number of abandon requests, longest waiting
5 time, percentage of available agents, number of work items, number of
6 work items delivered to an agent, and number of unassigned work
7 items
- 1 6. The method of claim 1, further comprising:
2 compiling statistics for the agent including start time, end time, availability
3 percent, busy percent, aux_work percent, and number of work items
4 served.

- 1 7. The method of claim 1, further comprising:
2 compiling a journal for a work item including the route for the work item,
3 escalation history of the work item, start time, end time, and journal
4 state history.
- 1 8. The method of claim 3, further comprising:
2 assigning a priority value to the media routes.
- 1 9. The method of claim 3, further comprising:
2 setting a maximum number of queued items for the media routes.
- 1 10. The method of claim 3, further comprising:
2 setting a time for escalating a work item.
- 1 11. A computer readable storage media comprising:
2 computer instructions to implement the method of claim 1.
- 1 12. A signal in a carrier medium comprising:
2 computer instructions to implement the method of claim 1.
- 1 13. An apparatus for maintaining real-time data for multi-channel
2 communication queuing, comprising:
3 means for forming a list of agent data, wherein the agent data includes
4 information related to types of communication media an agent can
5 access.
- 1 14. The apparatus of claim 13, wherein the agent data further includes
2 information related to the agent's skills.
- 1 15. The apparatus of claim 13, further comprising:
2 means for maintaining a list of media routes.

1 16. The apparatus of claim 15, further comprising:
 2 means for compiling statistics for the media routes including waiting time
 3 during a period, handling time during a period, number of abandon
 4 requests, longest waiting time, percentage of available agents, number
 5 of work items, and number of work items delivered to an agent.

1 17. The apparatus of claim 13, further comprising:
 2 means for compiling statistics for a communication channel of a specified
 3 media type including start time, end time, average wait time, average
 4 time spent handling a work item, number of abandon requests, longest
 5 waiting time, percentage of available agents, number of work items,
 6 number of work items delivered to an agent, and number of unassigned
 7 work items

1 18. The apparatus of claim 13, further comprising:
 2 means for compiling statistics for the agent including start time, end time,
 3 availability percent, busy percent, aux_work percent, number of work
 4 items served.

1 19. The apparatus of claim 13, further comprising:
 2 means for compiling a journal for a work item including the route for the work
 3 item, escalation history of the work item, start time, end time, and
 4 journal state history.

1 20. The apparatus of claim 15, further comprising:
 2 means for assigning a priority value to the media routes.

1 21. The apparatus of claim 15, further comprising:
 2 means for setting a maximum number of queued items for the media routes.

1 22. The apparatus of claim 15, further comprising:
 2 means for setting a time for escalating a work item.

1 23. A database structure for a multi-channel communication queuing
2 system, comprising:

3 a list of agent data, wherein the agent data includes information related to
4 types of communication media an agent can access.

1 24. The database structure of claim 23, wherein the agent data further
2 includes information related to the agent's skills.

1 25. The database structure of claim 23, further comprising:
2 a list of media routes.

1 26. The database structure of claim 25, further comprising:
2 a statistics table for the media routes including waiting time during a period,
3 handling time during a period, number of abandon requests, longest
4 waiting time, percentage of available agents, number of work items,
5 and number of work items delivered to an agent.

1 27. The database structure of claim 23, further comprising:
2 a statistics table for a communication channel of a specified media type
3 including start time, end time, average wait time, average time spent
4 handling a work item, number of abandon requests, longest waiting
5 time, percentage of available agents, number of work items, number of
6 work items delivered to an agent, and number of unassigned work
7 items

1 28. The database structure of claim 23, further comprising:
2 a statistics table for the agent including start time, end time, availability
3 percent, busy percent, aux_work percent, and number of work items
4 served.

1 29. The database structure of claim 23, further comprising:
 2 a journal table for a work item including the route for the work item,
 3 escalation history of the work item, start time, end time, and journal
 4 state history.

1 30. The database structure of claim 25, further comprising:
 2 priority values for the media routes.

1 31. The database structure of claim 25, further comprising:
 2 a maximum number of queued items for the media routes.

1 32. The database structure of claim 25, further comprising:
 2 a time for escalating a work item.

741300 v1